Agriculture

Management Intent

The overall management objectives for agricultural development in Fish Creek may be summarized as follows:

*To increase the statewide agricultural land base, thereby expanding agricultural production and broadening the state's economic base.
*To provide opportunity for development of a diversity of farms.
*To encourage production of crops complementary to market development.
*To protect the area's soil resources.
*To manage agricultural development so that the spawning habitat of the streams and lakes is not diminished, to minimize negative impact on other resource values in the unit, and to increase opportunities for recreational uses.
*To increase employment opportunities.

Classification

With certain limited exceptions, borough ordinance 13.28.050 requires that areas of 40 acres or larger with more than 40% of Soil Conservation Service capability classes II and III be classified prior to disposal as agricultural unless other conditions exist which require the use of the land for other purposes. State regulations provide for classifying suitable lands as Agricultural land. The Master Plan Map on page 47 shows the agricultural tracts that will be classified as Agricultural Land as part of this plan. Most Class II and III soils are included in the areas to be classified as Agricultural Land. Should further field investigation discover locations that do not meet the criteria of borough ordinance 13.28.050, other uses may be considered at that time. Actual classification of borough lands will not occur until further field work verifies the existence of Class II and III soils in the areas proposed to be classified as Agricultural.

Planned Actions

The Fish Creek agricultural project is planned and will be implemented jointly by the borough and the state. Ideally, development will proceed generally in the following sequence:

1. Adoption of the joint state/borough management plan.
2. Completion of baseline studies.
3. Development of access.
4. Enactment of a joint state/borough land sale.
5. Land clearing and timber salvage.
6. Development of utilities and support facilities (utilities could be developed sooner).

Legend

- Planning Area Boundary
- Private Land
- Intensive Settlement
- Non-intensive Settlement
- Agricultural Tract
- Public Recreation
- Public Retention
- Primary Road
- Secondary Road
- Trail

Susitna Corridor Management Unit

Nancy Lake State Recreation Area

MR1

MR2

MR3

T 18N

T 17N

Homestead Creek

Moraine Ridge Management Unit

Iditarod Historic Trail

Burn's Cabin

Hock Lake

T 17N

T 16N

Little Susitna Corridor Management Unit

R 7W R 6W

Flathorn Lake

Alternate Route

R 6W R 5W

Susitna Flats State Game Refuge

Susitna Hydroelectric Transmission Line—Proposed

North

0 1 mi.

FISH CREEK
Management Plan

Master Plan

Fish Creek's project status. Previous large agricultural sales have been treated as projects by the legislature. Funds for all development costs have been appropriated in a lump sum to the Alaska Agricultural Action Council (AAAC) who coordinated the agricultural projects. The AAAC terminated July 1, 1984. To increase the chances of successful agricultural development at Fish Creek, it is important that it be developed as a project, with funds for all development costs appropriated at one time. If this is done, the Department of Natural Resources will most likely assume the coordinating role.

If Fish Creek is assigned project status, requested funding would come from the legislature for access construction, land surveys, and project administration. Funding for access and clearing loans is very critical to the success of the Fish Creek project. The value of the timber, if salvaged, is unlikely to cover the costs of either road construction or land clearing. Both access and clearing are expensive. A preliminary cost estimate for a first generation gravel road system indicates it will cost a little over $17 million (for access from the south and phase 1 roads; see Road Phases Map, page 77). The clearing cost, estimated at $300 an acre, would come to $4.8 million for the 16,000 acres.

Agricultural land sale. Land ownership of the agricultural lands is divided between the state (40%) and the borough (60%). Borough ordinances limit the size of agricultural disposals to 640 acres per tract. Family farms producing for local market and consumption are regarded as most appropriate for the area, given its location. Other factors contributing to the diversity of farm sizes are:

*the stream and wetland areas;
*the projected primary transportation corridors;
*the historic Iditarod Trail corridor;
*the discontinuity of Class II and III soils;
*consideration of parcel shape (length and width);
*consideration of the land survey cost; and
*the ownership boundaries.

The borough and state will conduct land sales conveying 55 farm tracts into private ownership. The tracts will range in size from 40 to 700 acres, though no borough tract will exceed 640 acres. There are 14 state-owned tracts, 35 borough-owned tracts, and 6 state-borough tracts. A chart at the end of this chapter gives the soil class breakdown for each tract. The borough and state sales may be held separately if the state and borough terms are different. (see Chapter Four).

Land sale methods will be decided upon at the time of the sale; at present, state sales are by lottery and borough sales by auction. The borough currently sells leases with an option to purchase. The state may consider a similar system.

The exact timing of the sale will depend on availability of funding for access roads and surveying. Alaska statute 38.05.321 limits the sale of state land classified as agricultural to the transfer of agricultural rights only.

Borough ordinances (provisions of Title 13.28) provide for similar restrictions which are designed to discourage subdivision of agricultural soils into residential lots and to encourage the use of agricultural soils for farming.

The sale price for both state and borough parcels will include the value of the marketable, commercial timber on the parcel. See Forestry guideline #1, page 56. The minimum price for borough land will be established by the borough, based on the appraisal modified by the agricultural use restriction. The borough land will then be offered at auction. The final price will be determined by the bidders.

Use of timber resources. The farm tracts, together with their timber resources, will be sold to the successful applicant/bidder, who could then occupy the land immediately. Farmers will be encouraged to salvage the timber. See the Forestry section for details.

Land survey. A combination of meander and aliquot part surveys will be used in surveying the farm tracts in order to keep survey costs as low as possible while meeting two objectives: 1) keeping as much of the wetlands as possible in public ownership as required by the guidelines in the Willow Sub-Basin Plan, pages 100-101; and 2) delineating clearly between public and private lands.

Farmsteads. All farm parcels will include a farmstead area in which homes, barns, storage buildings, and other facilities usual for agricultural operation are sited. Provisions of 11 AAC 67.187 restrict farmstead sites on state lands to five acres unless the director of the Division of Agriculture determines that a larger area is necessary. Borough tracts will also include farmsteads of up to five acres. Woodlots are not included in the farmstead areas but may be identified in the farm conservation or development plans.

Windbreaks. Windbreaks are probably needed in the Fish Creek region because of the known wind conditions in the nearby Matanuska Valley, which are capable of eroding disturbed Class II and III soils, especially during the developmental period of the project. Rapid transitions can occur from the present large areas of native, near-climax vegetation to bare mineral soils, which are characteristically fragile.

Exact characteristics of local wind conditions are unknown at this time; a predominantly north-south wind pattern is suspected. The requirement for windbreaks is therefore a preventive measure. The study on wind direction and velocity called for in the guidelines may provide new information which may change the requirements for windbreaks.

Wetland buffers, stream buffers, and the historic Iditarod Trail buffer will all provide permanent windbreaks that in some areas may reduce the need to reserve additional windbreaks.

Mineral entry closure. Since the area's mineral resources are not considered to have economic value and since agriculture and hard rock or open pit coal mining are incompatible, the entire Fish Creek plan area will be closed to mineral entry and coal prospecting and leasing. (This does not apply to sand and gravel; see Materials section, page 86.) Since oil and gas operations are more compatible with agriculture, the area will be left open for oil and gas exploration and leasing.

Management Guidelines

1. Windbreaks will be required. Their location must be shown on the farm conservation plan. These windbreaks will be rows of natural vegetation a minimum of 30 feet wide. Where the existing vegetation is overmature and sparse, wider windbreaks are encouraged. The Division of Agriculture, SCS, or the Matanuska-Susitna Borough may require wider windbreaks and planting of additional trees where necessary prior to approving the farm conservation plan. Windbreaks will be at 660 foot intervals and will run from east to west unless the Division of Agriculture, SCS, or the Matanuska-Susitna Borough requires or approves a different interval or a different orientation based on information about wind direction at the particular farm. Selective timber harvest within windbreaks is permissible for either commercial or personal use (in order to allow selective timber harvesting prior to identification of windbreaks). Clearcutting within windbreaks is prohibited. If timber is to be harvested by clearcutting, windbreaks must be identified first. Pass-throughs up to 30 feet wide will be allowed, taking advantage of natural breaks in the vegetation to allow for equipment travel. Pass-throughs should be specified in the farm conservation plans. If further information shows that windbreaks are not necessary in the judgment of the Division of Agriculture or the Matanuska-Susitna Borough, farm conservation plans may be amended to allow clearing and cultivation of the windbreaks.

2. Farm Development Schedules will be required for all farms within the Fish Creek Unit. Farm Development Schedules will be determined by Divisions of Land and Water Management and Agriculture and the Matanuska-Susitna Borough after a more precise timetable is known for the proposed land sale. They will specify how much acreage must be cleared and cultivated each year and a timetable for clearing and cultivation. They will be made part of the sales contract.

3. Farming of publicly-owned right-of-way corridors. Following establishment of the transportation corridors and the construction of pioneer roads, the remainder of the road corridor not part of the actual roadway may be leased to private individuals for agricultural use subject to easements. This also applies to phase 2 and 3 roads prior to road construction. No permanent improvements will be allowed in the corridor. Temporary structures or agricultural improvements may occur on leased corridor lands at the risk of the lessee. Those leasing corridor lands will not be compensated for improvements placed on or activities conducted within the leased lands, should use of the corridor be required for transportation purposes (including utility lines). Such agricultural use may not preclude the use of these areas for hunting and access. Windbreaks may not be removed to obtain access to the right-of-way.

4. Farm conservation plans will be required for all farms within the Fish Creek unit. On state lands farm conservation plans will be approved by the Director, Division of Agriculture and the Soil Conservation Service sub-district in consultation with the Department of Fish and Game. On borough land Farm Development Plans will be approved by the Borough Assembly based on the recommendations of the Borough Agricultural Advisory Board, the Soil Conservation Service sub-district, and the Department of Fish and Game. Farm conservation and development plans will incorporate soil, water, and wildlife conservation practices as developed by the SCS and other affected agencies. ADF&G's technical assistance to farmers and soil conservation subdistricts in the preparation of farm conservation plans will be the primary means of incorporating fish and wildlife concerns into these plans. In addition they will include:

   - location of ground to be cleared and broken
   - access development
   - farmstead location
   - utilities development
   - windbreaks and pass-throughs
   - woodlots
   - material borrow and use areas
   - crossings of the Iditarod trail where applicable
   - buffers along wetlands or streams (see guideline 8 below and guideline 10 in section on Wetlands and Stream Corridors, page 62.)
   - location and type of crossing of any streams located within farm tracts or between two tracts sold to one person (see guideline 15 in section on Wetlands and Stream Corridors, page 63.)
   - timber sale or timber harvest plans (see Forestry guideline 2, page 56)

5. Use of surface water from wetland areas. (Refer to Wetlands section, (guideline 11, page 63.)

6. In borough tracts 1, 2, and 17, there will be a 200 foot publicly-owned buffer between ordinary high water on Flathorn Lake and agricultural tracts. The purpose of the buffer is to provide for public access along the lake and to protect water quality.

7. Tracts 7, 11, 22, 25, 31, and 37 contain both state and borough land. A cooperative agreement will be developed between the Matanuska-Susitna Borough and the Division of Land and Water Management prior to the land sale to allow these tracts to be sold as shown on the Master Plan. The borough will quit-claim the borough land in these tracts to the state in exchange for the revenues received from the sale of land originally owned by the borough. The state will sell the tracts and the sale will be subject to state terms. The borough portion of any combined tract may not exceed 640 acres. In lieu of this, a land exchange between the borough and state may be arranged so that each tract belongs to either the state or the borough; or the borough may select the state land in these tracts.

8. In tracts 6 and 23 there will be a 100 foot buffer on either side of the stream within these tracts in order to protect water quality. This land will be conveyed to private ownership as part of the tract and is to be

maintained in natural state. Where necessary to protect water quality, the farm conservation plan will require buffers wider than 100 feet on a case-by-case basis. This guideline applies to all tracts that have streams within them. Others may be discovered during tract survey.

9. See Forestry section for guidelines on land clearing.

10. Access to important public resources (e.g. wetlands and streams) should be maintained or improved during land disposals. Section line easements will not be vacated unless appropriate substitute physical and legal access exists. However, the location of realistic substitute access is encouraged. The substitution should be through publicly-owned trail corridors, but in some cases could be through a trail easement if significant use is not expected to occur. Determination of the adequacy of substitute access will be made by the Division of Land and Water Management in consultation with the Division of Parks and Department of Fish and Game on land purchased from the state and by the Matanuska-Susitna Borough on land purchased from the borough.

11. Agricultural tracts that are adjacent to existing private land will include an easement 100 feet wide along the common boundary between the existing private land and agricultural tracts to allow for road access to the private lots. Prior to use as a roadway, road easements may be cultivated. However, if members of the public wish to use the easement for access, the farmer must allow them to do so. The use may be a narrow trail or the farmer may reroute the trail around his field.

12. Corridors for phase 2 and 3 roads: see Chapter Three, Transportation Section, guideline 12, page 75.

13. Baseline studies. Prior to agricultural development the following studies should be conducted:

    - a water quality evaluation to determine present water water quality plus monitoring following the onset of development to determine whether changes in water quality occur;

    - surface and ground water evaluations to determine the quantity of water available for agricultural needs;

    - an instream flow study to determine the quantity of water needed from the three major streams to meet the needs of fish and wildlife (with Fish Creek as first priority);

    - wildlife and bird population study to determine baseline population data for large unqulates, small mammals, and birds in the different vegetation types represented within the agricultural project area;

    - pesticide residue sampling to detect and measure any residues that may exist in the area prior to agricultural development.

    Property owners in the area should be made aware of these studies and their results. See the appendix for list of those who have expressed interest in this plan.

Table 1
FISH CREEK
AGRICULTURAL TRACT ACREAGES
(Approximate)*

TRACT #	CLII	CLIII	CLIV	CL II & III	Wetlands	Roughlands	TOTAL	% CLII, III SOILS IN TRACT
1	--	228	122	228	83	--	436	52%
2	--	256	37	256	12	5	314	81%
3	20	366	6	386	55	4	461	84%
4	611	2	7	613	12	25	656	93%
5	425	--	44	425	16	31	516	82%
6	616	8	22	624	154	41	845	74%
7	316	--	--	316	1	15	331	95%
8	68	--	--	68	--	1	69	99%
9	154	14	9	168	--	2	180	94%
10	150	25	28	175	29	7	240	73%
11	263	--	81	263	21	11	377	70%
12	504	--	--	504	--	9	514	98%
13	184	--	6	184	--	16	208	89%
14	116	--	--	116	--	2	118	98%
15	64	259	85	323	25	11	445	73%
16	--	276	32	276	12	1	324	85%
17	16	384	15	400	13	14	442	91%
18	483	--	--	483	3	42	529	91%
19	294	219	9	513	29	11	564	91%
20	324	42	--	366	--	4	370	99%
21	44	130	--	174	40	13	229	76%
22	256	177	101	433	160	32	747	58%
23	7	174	5	181	22	1	209	87%
24	9	187	57	195	37	3	295	66%
25	607	9	30	616	41	6	696	89%
26	181	--	--	181	17	--	199	91%
27	465	37	11	502	30	7	557	90%
28	156	--	--	156	4	2	164	95%
29	16	51	--	66	6	8	81	82%
30	211	215	163	426	93	19	703	61%
31	350	--	3	350	43	32	428	82%
32	484	11	25	495	72	23	631	78%
33	146	--	33	146	24	--	212	69%
34	400	--	--	400	19	9	428	93%
35	223	--	--	223	53	6	283	79%
36	230	--	30	230	82	--	345	67%
37	111	--	6	111	44	1	162	69%
38	70	--	--	70	3	--	73	96%
39	134	--	--	134	28	--	163	82%
40	67	--	67	67	29	--	163	41%
41	84	--	8	84	--	--	92	91%
42	81	69	--	150	41	8	203	74%
43	55	59	3	114	27	25	169	67%
44	330	64	41	394	69	26	530	74%
45	203	--	4	203	5	8	220	92%
46	104	--	36	104	44	3	187	56%
47	74	85	156	159	34	32	382	42%
48	--	206	87	206	36	71	400	52%
49	209	121	--	330	107	--	438	75%
50	58	71	16	129	9	4	158	81%
51	37	13	16	50	9	--	76	66%
52	94	--	31	94	15	--	140	67%
53	22	--	--	22	--	--	22	98%
54	168	--	11	168	16	13	208	81%
55	156	--	5	156	32	15	220	71%
56	27	92	50	119	26	8	211	57%
57	200	79	--	279	39	--	319	88%
58	201	11	25	212	41	--	286	74%
59	68	--	118	68	22	39	257	27%
MR1	--	74	--	74	30	--	105	71%
MR2	--	85	43	85	7	8	142	59%
MR3	--	118	--	118	--	7	125	94%
BOROUGH	6,785	3,864		10,649			13,536	
STATE	4,681	646		5,329			7,214	
TOTAL	11,466	4,510	1,739	15,978	2,110	886	20,750	

* Acreages are approximate because they are calculated from data represented at 1:63,360; precise acreages will not be available until the tracts are surveyed. Acreage included in secondary roads (100 ft. corridors) has not been subtracted out of tracts. Discrepancies between the total of the categories and the total acreage in the tracts is generally due to water and imprecision in the data.